

AMENDMENT AFTER FINAL  
Reply to Office Action of March 19, 2004

Serial No.: 09/730,100  
Attorney Docket: Case 6121

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**Remarks**

These remarks are presented in response to an Office Action dated March 19, 2004, which was a supplemental Office Action to correct the error of the previous Action, in particular, the Examiner clarified that the obvious-type double patenting rejection is applied to claim 19, not to claim 1 as previously presented.

The Examiner indicated that certain allowable subject matter was contained in the application. The present amendment and foregoing remarks are intended to amend the application, without prejudice, so as to conform with the allowable subject matter identified by the Examiner. Accordingly, reconsideration and allowance of the application, in view of the following amendment and remarks, is respectfully requested.

The Examiner rejected claim 19 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,503,470 alone or in view of Rosenthal et al. (U.S. Patent No. 6,214,304). The Examiner opined that the oxidizing step of the '470 patent was broad enough to encompass claim 1 (presumably, claim 19) and that Rosenthal provided examples of oxidizing agents.

The Examiner also rejected claims 19-25 under 35 USC §112, first paragraph, as failing to comply with the written description requirement. The Examiner opined that the claims contain subject matter not described in the specification in a way which reasonably conveys to one skilled in the art that the inventors had possession of the invention at the time the application was filed, specifically stating "[t]he specification does not support the claim language of claim 1, which reads 'elemental mercury at a concentration of less than 50  $\mu\text{g}/\text{m}^3$ .' The specification has support only for a concentration between 5 and 30  $\mu\text{g}/\text{m}^3$ ." Insofar as the amended claims already cited this range and as further evidenced by the Examiner's erroneous reference to claim 1 quoted above, Applicants submit that this rejection does not apply to the claims of record.

Finally, the Examiner rejected claims 19-20 and 22-24 under 35 USC §103(a) as being unpatentable over Rosenthal in view of Audeh (U.S. Patent No. 5,034,203). The Examiner opined that Rosenthal teaches a method of using aqueous alkali sulfide to remove mercury, specifically noting that NaOCl is the sodium salt of hypochlorous acid (HClO), but the Examiner conceded Rosenthal does not teach the concentration of mercury being removed—a central point



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in Applicants' invention. The Examiner went on to observe that Audeh teaches mercury removal to final concentrations of less than  $0.01 \mu\text{g}/\text{m}^3$  when the initial concentration is  $0.03$  to  $10 \mu\text{g}/\text{m}^3$  and concluded that Rosenthal will result in the near complete removal of mercury from the flue gas. The basis for combining these references was not explained, and Applicants specifically traverse this rejection insofar as the fundamental nature and physical properties of mercury demonstrate that it is extremely unpredictable when found at low concentrations (this point is explained in Applicants' specification and in the previous applications/patents referenced in the specification).

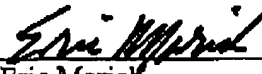
Notwithstanding the above, the Examiner indicated that claims 21 and 25 would be allowable if rewritten in independent form including all the limitations of the base and intervening claims and if rewritten to overcome the rejection under 35 USC §112, first paragraph. As such, Applicants submit that the rejection under 35 USC §112, first paragraph, is moot in view of the Examiner's indication of allowable subject matter and the action taken by the present Amendment.

As seen above, Applicants have amended claim 19 to cover the allowable subject matter referenced above. These amendments are supported by the specification and the arguments previously entered into the record. Pursuant to 37 CFR §1.116(b), it is therefore believed that this Amendment is proper and, to the extent that the limitations of claims 21 and 25 have been inserted into the main independent claim 19 pursuant to the Examiner's suggestion, it is believed that the present Amendment places the case in condition for allowance.

In light of the foregoing, Applicants respectfully submit that, by this Amendment, the present application is now in condition for allowance, and such action is hereby requested.

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Respectfully submitted,

  
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